Amendments to the Specification:

Applicants respectfully assert that no new matter has been added to the substitute paragraphs below.

Please replace paragraph [0002] with new paragraph [0002], shown below:

[0002] 1. U.S. Patent Application No. 10/087,400, entitled "Wafer Engine," which was filed with the U.S. Patent and Trademark Office on March 1, 2002;

Please replace paragraph [0003] with new paragraphs [0003] and [0003.1], shown below:

[0003] 1. U.S. Patent Application No. 10/087,638, entitled "Unified Frame for Semiconductor Material Handling System," which was filed with the U.S. Patent and Trademark Office on March 1, 2002; and

[0003.1] 1. U.S. Patent Application No. 10/234,640 entitled "Universal Modular Wafer Transport System," which was filed with the U.S. Patent and Trademark Office on September 3, 2002.

Please replace paragraph [0081] with new paragraph [0081], shown below:

[0081] Each vertical strut 102 also has a cam guide 124 machined into the side surface. The cam 124 operates as a track or channel for guiding the FOUP door open/close module 139 rearward away from the FOUP 10 and subsequently downward into the air flow area 121. The movement of the port/pod door assembly 139 may be controlled by a motor assembly (shown enclosed in a motor assembly housing 125 in Fig. 7) located within the processing station. Such a motor assembly is known in the art and does not require further disclosure. It is within the scope and spirit of the invention to mechanically guide and move the FOUP door 12 and port door 140 into the storage area 121.

Please replace paragraph [0149] with new paragraph [0149], shown below:

[0149] Fig. 28 illustrates an example motion sequence of the wafer engine 300 having a rapid swap slide body 400 with off-center rotation axis. By way of example only, Fig. 28-1 illustrates the wafer engine 300 lifting the wafer at load port area one. Fig. 28-2 illustrates the wafer engine 300 retracting the wafer from within load port one along a radial axis. Fig. 28-3 illustrates the wafer engine 300 rotating about the theta axis and simultaneously moving back along the x-axis to avoid collision with load port one. Fig. 28-4 illustrates the wafer engine 300 moving along the x-axis towards the I/O port of the processing station. Fig. 28-5 illustrates the wafer engine 300 continuing to rotate about the theta axis and along the x-axis to position the wafer for entry into the processing station. Fig. 28-6 illustrates the wafer engine 300 waiting for the process to complete. Fig. 28-7 illustrates the wafer engine 300 swapping the processed wafer for the new wafer ready to enter the processing station. Finally, Fig. 28-8 illustrates the wafer engine 300 retracting the processed wafer in a radial axis while simultaneously moving along the x and theta axis to return the processed wafer into load port one, two or three.

Please replace paragraph [0153] with new paragraph [0153], shown below:

[0153] Figs. 29-31 illustrate several configurations of the integrated system. Fig. 29A illustrates the integrated system mounted on a roll out frame 199. As previously mentioned, conventional EFEMs extend all the way down to the floor of the wafer fab. With the space savings derived from constructing an EFEM from a spine structure 100 or other embodiments disclosed in this application, the footprint of the integrated system is greatly reduced. As shown in Fig. 29A, the integrated system is mounted on a roll out frame 199 so that the load port assemblies remain at the SEMI standard height of 900mm. When this integrated system is bolted to the front end of a processing tool, and in a preferred embodiment, there will be approximately 2 feet of open space located beneath the integrated system and the wafer fab floor. This space has never been available in a wafer fab before. Such a space will allow semiconductor manufactures to place other items such as an electrical control box underneath the integrated system.

Please replace paragraph [0155] with new paragraph [0155], shown below:

[0155] Figs. 30A-B illustrate the integrated system integrated into a process tool. By way of example only, the system of the present invention may be integrally formed and mounted to a process tool. One advantage of this system is that if every process tool within the wafer fab had an integrated system mounted to it, the wafer fab would have a front and load system that can be configured to the needs of each process tool yet contain a similar environment to reduce the need for stocking spare parts and training maintenance personnel.